

Work Order ID 142270

March 04, 2016 8:48:21 AM

142270

Page 1

Item ID: D2938-2RLC

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Saddle RH Out, 206

Stop ***NS2***

Start Date: 3/7/2016 Start Qty: 5.00

5

Cust Item ID:

Required Date: 3/18/2016 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: SJA Date: 20160304 Fooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2938	Rev C								

100
100 HAAS CNC VERTICAL MACHINING #1 0.00
HAAS 1
HAAS CNC vertical machine #1
Memo Program part number and batch number.
1-Inspect part number and batch number are programmed correctly.
2-Machine Step No 1 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet
3-Machine Step No 2 of Folio and visually inspect as per

B.a 16/03/09 5 0 9-89 **DAS 08 40 9-89**

110
110 CONVENTIONAL MILLING MACHINE 0.00
Mill Conv
Conventional Milling Machine
Memo Machine Keyway and inspect per attached dimension sheet

B.a 16/03/12 5 0 9-89 **DAS 08 40 9-89**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Page 2

Reference:

Stop *NR2*

Quality Control

Quality Control

Hand Finishing

5 ~~0~~ DAS
08
9-89

DAS
44
9-89 11/03/14

5 x d 211063/21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order update only

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION ☐ Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved		AGAINST DEPARTMENT/PROCESS ☐ Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause ☐ Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence							
		OTHER :							

Work Order ID 142270

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Item ID: D2938-2RLC Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle RH Out, 206
 Start Date: 3/7/2016 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 3/18/2016 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150		0.00							DAS 41 9-89 16-4-4
150						5			
SprayPaint	Memo	0.00							
Spray Painting	(Boeing primer and same paint as float skidtubes).								
	Prime per OSI005 4.2.1.3.3 BATCH: <u>132919</u>								
	<i>white</i> Paint per OSI005 4.2.2.4 BATCH: <u>134341</u>								
160	QC14- Inspect Spray Paint	0.00							DAS 38 9-89 APR 05 2016
160						5			
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <u>St 3915</u>	0.00							
170									
Packaging	Memo	0.00							DAS 6 9-89
Packaging									

8 APR 06 2016

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Page 4

Item ID: D2938-2RLC

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Saddle RH Out, 206

Stop ***NS2***

Start Date: 3/7/2016 Start Qty: 5.00

5

Cust Item ID:

Required Date: 3/18/2016 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.01

Quality Control

MCS APR 06 2016

MCS APR 06 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Page 1

Work Order ID: 142270

142270

Parent Item: D2938-2RLC

D2938-2RI C

Parent Item Name: Saddle RH Out, 206

Start Date: 3/7/2016

Required Date: 3/18/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP: B 00.06.26 New DWG rev (mpp 2069)EC
IPP Rev:C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-003		Manufactured	No			100	Each	64.0000	1	5			
D6101-003									**				
Saddle Billet, 7075													

Location

Loc Qty

Loc Code

MAT045

6

136764

6

MAT046

58

138991

20

140552

18

141201

20

5

DART AEROSPACE LTD	Work Order: 142270 137733
Description: 206 Saddle, Outboard, Right side	Part Number: D2938-2
Inspection Dwg: D2938 Rev. C	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. C and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.100	0.140		0.114	0.115	0.114	0.114		
B	0.100	0.140		0.115	0.115	0.115	0.116		
C	0.100	0.140		0.115	0.115	0.116	0.115		
D	0.210	0.230		0.220	0.220	0.220	0.220		
E	1.245	1.255		1.250	1.250	1.250	1.250		
F	1.245	1.255		1.250	1.250	1.250	1.250		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		0.512	0.512	0.512	0.512		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.500	2.500	2.500	2.500		
K	0.257	0.262		0.258	0.258	0.258	0.258		
L	0.312	0.317		0.314	0.314	0.314	0.314		
M	0.235	0.240		0.238	0.238	0.238	0.238		
N	0.100	0.140		0.117	0.117	0.118	0.117		
O	0.540	0.560		0.548	0.548	0.548	0.548		
P	0.490	0.510		0.500	0.500	0.500	0.500		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.740	2.740	2.740	2.740		
S	0.240	0.270		0.252	0.252	0.251	0.252		
T	0.100	0.180		0.130	0.130	0.130	0.130		
U	1.625	1.635		1.630	1.630	1.630	1.630		
V	1.362	1.372		1.367	1.367	1.367	1.367		
W	0.316	0.321		0.316	0.316	0.316	0.316		
X	1.250	1.270		1.261	1.261	1.261	1.261		
Y	1.565	1.585		1.576	1.576	1.576	1.576		
Z	0.178	0.198		0.188	0.188	0.188	0.188		
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by: <u>BA</u>
Date: <u>16/03/09</u>

Audited by: <u>FK</u>
Date: <u>16/03/09</u>

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM	

142270

DART AEROSPACE LTD	Work Order:	137733
Description: 206 Saddle, Outboard, Right side	Part Number:	D2938-2
Inspection Dwg: D2938 Rev. C		Page 1 of 1

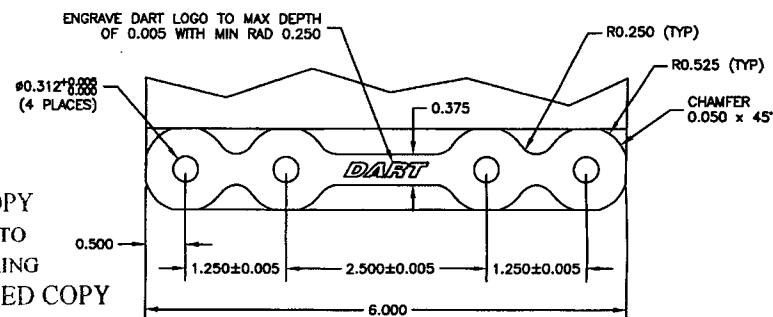
Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. C and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	✓5	✗	✗	✗	By	Date
A	0.100	0.140		0.115					
B	0.100	0.140		0.115					
C	0.100	0.140		0.115					
D	0.210	0.230		0.220					
E	1.245	1.255		1.250					
F	1.245	1.255		1.250					
G	2.495	2.505		2.500					
H	0.510	0.515		0.512					
I	1.572	1.582		1.577					
J	2.495	2.505		2.500					
K	0.257	0.262		0.258					
L	0.312	0.317		0.314					
M	0.235	0.240		0.238					
N	0.100	0.140		0.117					
O	0.540	0.560		0.548					
P	0.490	0.510		0.500					
Q	3.715	3.725		3.720					
R	2.720	2.760		2.740					
S	0.240	0.270		0.253					
T	0.100	0.180		0.130					
U	1.625	1.635		1.630					
V	1.362	1.372		1.367					
W	0.316	0.321		0.316					
X	1.250	1.270		1.261					
Y	1.565	1.585		1.576					
Z	0.178	0.198		0.188					
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by: B.a
Date: 16/03/09

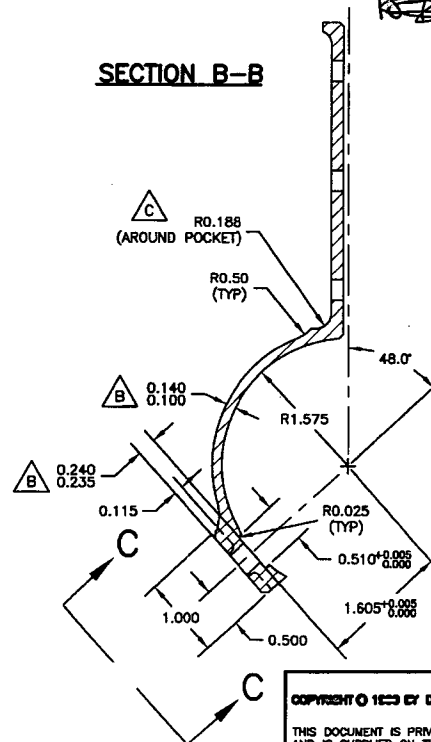
Audited by: RF FK
Date: 16/03/14

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM	



20160304 VIEW C-C

D2938-1 LH SADDLE (SHOWN)
D2938-2 RH SADDLE (OPPOSITE)



- NOTES:**
- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)
(MAKE FROM D6101-003 SADDLE BILLET, 7075)
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
 - 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
 - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) ALL DIMENSIONS ARE IN INCHES
 - 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP

C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	DRAWN BY	 DART AEROSPACE USA, INC. BELLEVUE, WA
		
CHECKED	APPROVED	DRAWING NO.
		D2938
DATE		TITLE
06.11.09		SADDLE OUTSIDE

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